

CLAIMS:

1. A system for controlling the demultiplexing process in an optical backplane device, the optical backplane device including:
 - 5 a modulator means, which is controlled by a modulator control signal and which extracts a selected compressed data packet from a multiplexed stream of compressed packets;
 - a monitoring means, wherein the effect of timing errors on decompressed pulse trains is monitored, each decompressed pulse train
 - 10 having a leading edge and a trailing edge; and
 - a control signal adjusting means, wherein the timing errors are corrected by adjusting the timing of the modulator control signal.
2. A system as claimed in Claim 1, wherein the timing of the modulator
- 15 control signal is continuously adjusted to minimise timing errors.
3. A system as claimed in Claims 1 or 2, wherein the timing of the modulator control signal is advanced if the trailing edge of a given decompressed pulse train is reduced more than the leading edge of said
- 20 decompressed pulse train and delayed if the leading edge of the given decompressed pulse train is reduced more than the trailing edge of said decompressed pulse train.
4. A system as claimed in Claim 3, wherein both the delay and the
- 25 advance are proportional to the difference in reduction between the leading and trailing edges.

5. A system as claimed in any one of Claims 1 to 4, wherein the timing of the modulator control signal makes use of calibration pulse trains of known value and suitable form to adjust the timing of modulator control pulses.

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6. A system as claimed in Claim 5, wherein the timing of the modulator control signal makes use of a calibration pulse train consisting of binary 'ones' only.

10 7. A system as claimed in Claim 5, wherein the timing of the modulator control signal makes use of a calibration pulse train consisting of a finite repeating sequence of binary 'one' followed by binary 'zero'.

15 8. A system substantially as hereinbefore described with reference to the accompanying Figures 1, 2 and 3.

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